

Bridge M2114 Inspection Report



Latitude:33.42851, Longitude:-92.15555

Route:160 Section:09 Log:1.75

Arnold Road ID:6x160x9xA, Arnold Log mile:1.744

District 07, 11 - Bradley County

Owner: 1 - State Highway Agency

Inspection Direction: 1 - N to S

Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

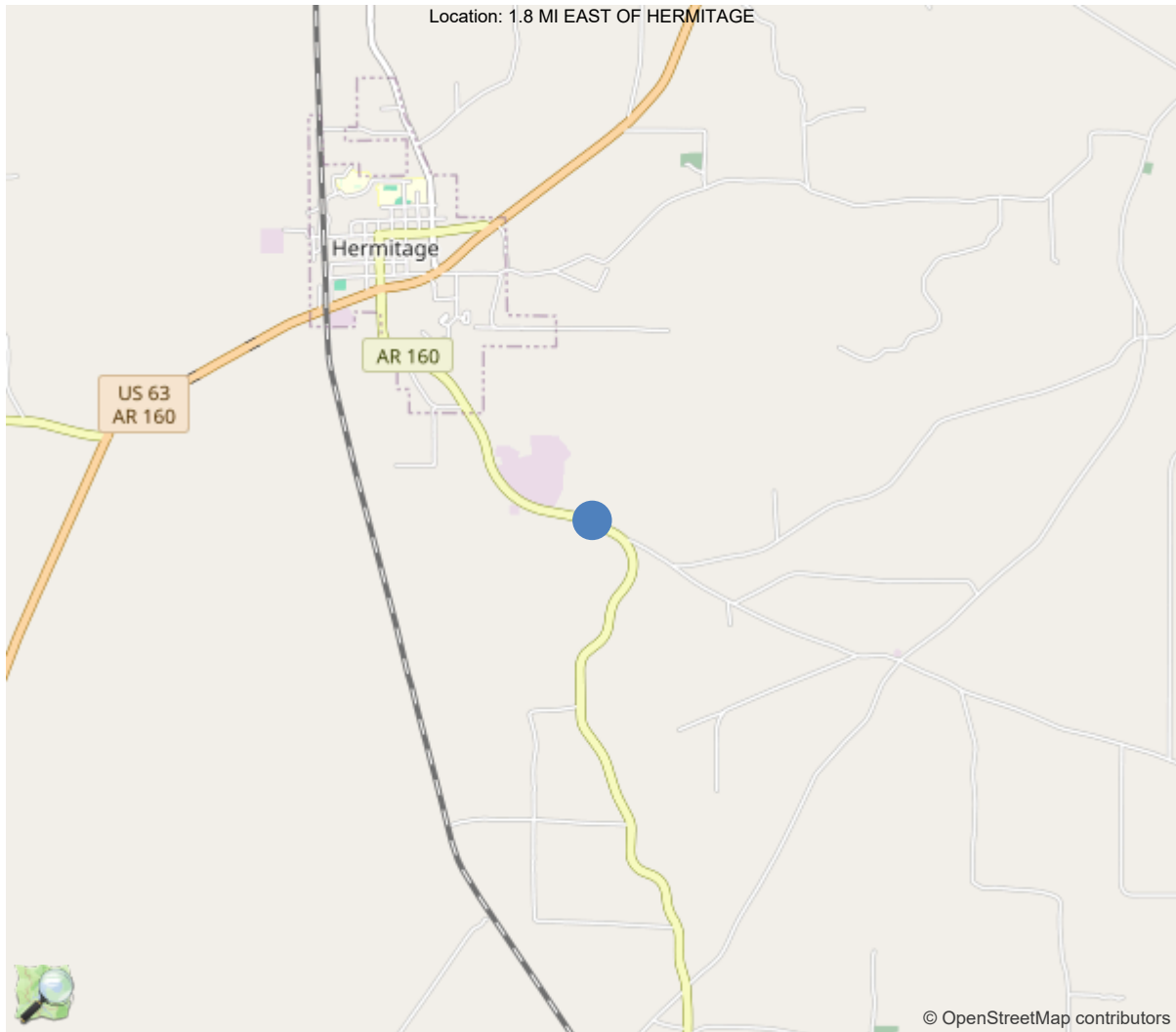
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	30		
Code 9 (31 Tons)	33		
Code 5 (40 Tons)	41		

If calculated capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner.



30"x36" AR



33.42851, -92.15555

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M2114
(5) Inventory Route	1
(2) Highway Agency District	07 - District 07
(3) County Code	11 - Bradley County
(4) Place Code	0
(6) Features Intersected	GRASSY POND CREEK
(7) Facility Carried	SH 160 / S-9
(9) Location	1.8 MI EAST OF HERMITAGE
(11) Mile Point	1.75 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	33.4285145502601
(17) Longitude	-92.1555472012234
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	122
Material	1 - Concrete
Type	22 - Channel beam
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	4
(46) No. of Approach Spans	0
(107) Deck Structure Type	2 - Concrete Precast Panels
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1964
(106) Year Reconstructed	0
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	872
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	6 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	31 ft
(49) Structure Length	124 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	24.3 ft
(52) Deck Width Out to Out	26.3 ft
(32) Approach Roadway Width (W/Shoulders)	27.9 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	24.3 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	1 - Navigation protection not
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	0
(26) Functional Class	7 - Rural Major Collector
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exists
(102) Direction of Traffic	2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	7
(59) Superstructure	7
(60) Substructure	5
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	45
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	27
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	7
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	7 - Countermeasures have been installed
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	0 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 0
(97) Year of Improvement Cost Estimate	
(114) Future ADT	1150
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			09/30/2024
(91) Frequency			24
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			



Team Lead: John Parks, Inspection Date: 09/30/2024

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	M2114
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	
B.W.01 Year Built	1964

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	11 - Bradley County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	07 - District 07
B.L.05 Latitude	33.4285145502601
B.L.06 Longitude	-92.1555472012234
B.L.07 Border Bridge Number	
B.L.08 Border Bridge State or Country Code	
B.L.09 Border Bridge Insp. Resp.	
B.L.10 Border Bridge Designated Lead State	
B.L.11 Bridge Location	1.8 MI EAST OF HERMITAGE
B.L.12 Metropolitan Planning Organization	

CLASSIFICATION	
B.CL.01 Owner	S01 - State transportation departme
B.CL.02 Maint. Responsibility	S01 - State transportation departme
B.CL.03 Federal or Tribal Land Access	N - Not Applicable
B.CL.04 Historic Significance	N - Bridge is not eligible for the
B.CL.05 Toll	N - Bridge does not carry a toll ro
B.CL.06 Emergency Evacuation Designation	

ROADSIDE HARDWARE	
B.RH.01A Bridge Railing Type	
B.RH.01B Bridge Railing Year (YY)	
B.RH.01C Bridge Railing Test Level	
B.RH.02A Transition Type	
B.RH.02B Transition Year (YY)	
B.RH.02C Transition Test Level	

BRIDGE GEOMETRY	
B.G.01 NBIS Bridge Length	121
B.G.02 Total Bridge Length	124
B.G.03 Max Span Length	30.8
B.G.04 Min Span Length	31
B.G.05 Bridge Width Out-to-Out	26.2
B.G.06 Bridge Width Curb-to-Curb	24.3
B.G.07 Left Curb or Sidewalk Width	0
B.G.08 Right Curb or Sidewalk Width	0
B.G.09 Approach Roadway Width	27.9

B.G.10 Bridge Median	0 - No median
B.G.11 Skew	0
B.G.12 Curved Bridge	N - Not curved
B.G.13 Max Bridge Height	13
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	3255

LOADS AND LOAD RATING	
B.LR.01 Design Load	H15 - H-15
B.LR.02 Design Method	
B.LR.03 Load Rating Date	
B.LR.04 Load Rating Method	LFR - Load Factor Rating
B.LR.05 Inventory Load Rating Factor	0.75
B.LR.06 Operating Load Rating Factor	1.25
B.LR.07 Controlling Legal Load Rating Factor	
B.LR.08 Routine Permit Loads	

INSPECTION REQUIREMENTS	
B.IR.01 NSTM Inspection Required	N - NSTM inspection not required.
B.IR.02 Fatigue Details	N - No E/E' details
B.IR.03 UW Inspection Required	N - Underwater inspection not requi
B.IR.04 Complex Feature	N - Bridge does not have complex fe

COMPONENT CONDITION RATINGS	
B.C.01 Deck Condition Rating	7 - GOOD - Some minor defects.
B.C.02 Superstructure Condition	7 - GOOD - Some minor defects.
B.C.03 Substructure Condition	6 - SATISFACTORY - Widespread
B.C.04 Culvert Condition	N - NOT APPLICABLE - Component
B.C.05 Bridge Railing Condition	6 - SATISFACTORY - Widespread
B.C.06 Bridge Railing Transitions Condition	N - NOT APPLICABLE - Component
B.C.07 Bridge Bearings Cond.	N - NOT APPLICABLE - Component
B.C.08 Bridge Joints Condition	N - NOT APPLICABLE - Bridge do
B.C.09 Channel Condition Rating	6 - SATISFACTORY - Widespread
B.C.10 Channel Protection Condition	5 - FAIR - Some moderate defec
B.C.11 Scour Condition Rating	6 - Widespread minor or isolat
B.C.12 Bridge Condition Classification	F - Fair
B.C.13 Lowest Condition Rating	6 - SATISFACTORY - Widespread
B.C.14 NSTM Insp. Condition	N - NOT APPLICABLE - Component
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	G - Good
B.AP.02 Overtopping Likelihood	3 - Low - once every 26 to 50 years
B.AP.03 Scour Vulnerability	0 - Scour appraisal has not been co
B.AP.04 Scour Plan of Action	0 - A scour POA is not required.
B.AP.05 Seismic Vulnerability	0 - Seismic evaluation not complete

SPAN SETS			
M1			
B.SP.02 # of Spans	4	B.SP.08 Deck Interaction	IM - Integral or monolithic
B.SP.03 # of Beam Lines	7	B.SP.09 Deck Material and Type	C02 - Reinforced concrete - pr
B.SP.04 Span Material	C02 - Reinforced concrete - pr	B.SP.10 Wearing Surface	0 - None
B.SP.05 Span Continuity	1 - Simple or single span	B.SP.11 Deck Protective System	0 - None
B.SP.06 Span Type	G07 - Girder/beam - channel ad	B.SP.12 Deck Reinforcing Protective System	0 - None
B.SP.07 Span Protective System	0 - None	B.SP.13 Deck Stay-In-Place Forms	0 - None

SUBSTRUCTURE SETS			
A1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	P05 - Pile - timber
B.SB.04 Substructure Type	A02 - Abutment - stub	B.SB.07 Foundation Protective System	T01 - Treated - timber preserv
P1			
B.SB.02 No. of Substructure Units	3	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	P05 - Pile - timber
B.SB.04 Substructure Type	B03 - Bent - pile	B.SB.07 Foundation Protective System	T01 - Treated - timber preserv
P2			
B.SB.02 No. of Substructure Units	1	B.SB.05 Substructure Protective System	C01 - Coating - paint
B.SB.03 Substructure Material	S01 - Steel - rolled shapes	B.SB.06 Foundation Type	F01 - Footing - not on rock
B.SB.04 Substructure Type	P05 - Pier - straddle or c-sha	B.SB.07 Foundation Protective System	0 - None
P3			
B.SB.02 No. of Substructure Units	1	B.SB.05 Substructure Protective System	C01 - Coating - paint
B.SB.03 Substructure Material	S01 - Steel - rolled shapes	B.SB.06 Foundation Type	F01 - Footing - not on rock
B.SB.04 Substructure Type	P03 - Pier - multiple column	B.SB.07 Foundation Protective System	0 - None

HIGHWAY FEATURES			
H1			
B.F.02 Feature Location	C - Carried on bridge	B.H.09 Annual ADT	872
B.F.03 Feature Name	SH 160 / S-9	B.H.10 Annual ADTT	8
B.H.01 Functional Classification	5 - Major Collector	B.H.11 Year of Annual ADT	2018
B.H.02 Urban Code	99999	B.H.12 Highway Max Usable Vertical Clearance	99.9
B.H.03 NHS Designation	N - Non-NHS	B.H.13 Highway Min Vertical Clearance	99.9
B.H.04 National Highway Freight Network	N - Not on the NHFN	B.H.14 Highway Min Horizontal Clearance, Left	
B.H.05 STRAHNET Designation	N - Not a STRAHNET route	B.H.15 Highway Min Horizontal Clearance, Right	
B.H.06 LRS Route ID		B.H.16 Highway Max Usable Surface Width	25.5
B.H.07 LRS Mile Point	1.75	B.H.17 Bypass Detour Length	6
B.H.08 Lanes On Highway	2	B.H.18 Crossing Bridge Number	



Team Lead: John Parks, Inspection Date: 09/30/2024

HIGHWAY ROUTES					
Highway Parent	B.RT.01 Route Designation	B.RT.02 Route Number	B.RT.03 Route Direction	B.RT.04 Route Type	B.RT.05 Service Type
H1	1	160	2-T - TEMP - Two-way traffic - NS or EW	3 - State route	1 - Mainline

WATERWAY FEATURES					
W1					
B.F.02 Feature Location	B - Below bridge	B.N.03 Movable Bridge Max Navigation Vertical Clearance			
B.F.03 Feature Name	GRASSY POND CREEK	B.N.04 Navigation Channel Width			
B.N.01 Navigable Waterway	N - Not navigable waters	B.N.05 Navigation Channel Min Horizontal Clearance			
B.N.02 Navigation Min Vertical Clearance		B.N.06 Substructure Navigation Protection			

POSTING STATUS DATA	
B.PS.01 Load Posting Status	B.PS.02 Posting Status Change Date
PO - Permanent and Open	

LOAD EVALUATION AND POSTING			
B.EP.01 Legal Load Configuration	B.EP.02 Legal Load Rating Factor	B.EP.03 Posting Type	B.EP.04 Posting Value



Asset #M2114(Routine, Underwater type 2)

SH 160 / S-9 over GRASSY POND CREEK

Location: 1.8 MI EAST OF HERMITAGE

Team Lead: John Parks Inspection Date: 09/30/2024

Inspection Notes

General Observation

This bridge is Precast Channel Unit spans with stub abutments and pile bents. Waders are used for access to inspect the underside of all spans, stub abutments, and pile bents. Supplemental steel column bents have been added back and ahead of Bent 3. Inspection tools used are probing rods, tape measures, levels, and flashlights.

58 - Deck (7 - GOOD CONDITION - some minor problems.)

Deck is rated 7 due to the channel unit top flanges having no defects observed in the under surface of the top flange. There are no defects in the top surface of the top flange reflecting through the wearing surface. Asphalt wearing surface has minor cracks.

59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

Superstructure is rated 7 do to the channel unit legs having minor spalls and cracks.

60 - Substructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Substructure is rated 5 due to Bent 3 cap has dropped previously causing the cap to crack. Supplemental bents are in place to support Spans 2 and 3 at Bent 3. Other caps have minor cracks and spalls. Most of the timber piles have been repaired by concrete splice collars.

61 - Channel/Channel Protection (6 - Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly.)

Channel is rated 6 due to banks are slumping and debris in the stream.

B.C.05 Bridge Railing Condition Rating (6 - SATISFACTORY - Widespread minor or isolated moderate defects.)

Bridge rail is rated 6 due to the entire length of both rails have surface corrosion.

B.C.10 Channel Protection Condition Rating (5 - FAIR - Some moderate defects; performance of the channel protection is not affected.)

Channel protection is rated 5 due to there is riprap in place at the end of the abutment but not in the center. This is allowing embankment to be eroded below the abutment stubs.

A-B.C.11 - B.C.11 Scour Condition Rating (New NBIS) (6 - Widespread minor or isolated moderate scour.)

Scour condition is rated 6 due to minor scour present at the bridge and previous scour has been repaired. The stream bed is clay gravel.

National Bridge Element Quantities and Notes

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	3261	3261	0	0	0
510	Wearing Surfaces	SF	3013	2970	43	0	0
3210	Delam/Spall/Patched Area/Pothole	SF	43	0	43	0	0
(16) Span 1:							
Unit 1, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 2, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 3, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 4, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 5, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 6, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 7, top surface, no defects observed.							
Under surface, no defects observed.							
Span 2:							
Unit 1, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 2, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 3, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 4, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 5, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 6, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 7, top surface, no defects observed.							
Under surface, no defects observed.							
Span 3:							
Unit 1, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 2, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 3, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 4, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 5, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 6, top surface, no defects observed.							
Under surface, no defects observed.							
Unit 7, top surface, no defects observed.							
Under surface, no defects observed.							

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Span 4: Unit 1, top surface, no defects observed. Under surface, no defects observed. Unit 2, top surface, no defects observed. Under surface, no defects observed. Unit 3, top surface, no defects observed. Under surface, no defects observed. Unit 4, top surface, no defects observed. Under surface, no defects observed. Unit 5, top surface, no defects observed. Under surface, no defects observed. Unit 6, top surface, no defects observed. Under surface, no defects observed. Unit 7, top surface, no defects observed. Under surface, no defects observed. (510-16) Span 1: 4SF spall CS2 Span 2: 24SF spall CS2 Span 3: 15SF spall CS2 Span 4: No defects observed.							
110	Reinforced Concrete Open Girder/Beam	LF	868	864	4	0	0
1080	Delamination/Spall/Patched Area	LF	4	0	4	0	0
(110) Span 1: Unit 1 Left leg, no defects observed. Right leg, no defects observed. Unit 2 Left leg, no defects observed. Right leg, no defects observed. Unit 3 Left leg, no defects observed. Right leg, no defects observed. Unit 4 Left leg, no defects observed. Right leg, no defects observed. Unit 5 Left leg, no defects observed. Right leg, no defects observed. Unit 6 Left leg, no defects observed. Right leg, no defects observed. Unit 7 Left leg, no defects observed. Right leg, no defects observed. Span 2: Unit 1 Left leg, no defects observed. Right leg, no defects observed. Unit 2 Left leg, no defects observed. Right leg, 1LF spall CS2 Unit 3 Left leg, no defects observed. Right leg, 1LF spall CS2 Unit 4 Left leg, no defects observed. Right leg, no defects observed.							

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Unit 5 Left leg, no defects observed. Right leg, no defects observed. Unit 6 Left leg, no defects observed. Right leg, no defects observed. Unit 7 Left leg, no defects observed. Right leg, no defects observed. Span 3: Unit 1 Left leg, no defects observed. Right leg, no defects observed. Unit 2 Left leg, no defects observed. Right leg, no defects observed. Unit 3 Left leg, no defects observed. Right leg, 1LF spall CS2 Unit 4 Left leg, no defects observed. Right leg, no defects observed. Unit 5 Left leg, no defects observed. Right leg, no defects observed. Unit 6 Left leg, no defects observed. Right leg, no defects observed. Unit 7 Left leg, no defects observed. Right leg, no defects observed. Span 4: Unit 1 Left leg, no defects observed. Right leg, no defects observed. Unit 2 Left leg, 1LF spall CS2 Right leg, no defects observed. Unit 3 Left leg, no defects observed. Right leg, no defects observed. Unit 4 Left leg, no defects observed. Right leg, no defects observed. Unit 5 Left leg, no defects observed. Right leg, no defects observed. Unit 6 Left leg, no defects observed. Right leg, no defects observed. Unit 7 Left leg, no defects observed. Right leg, no defects observed.							
202	Steel Column	EA	13	0	13	0	0
1000	Corrosion	EA	13	0	13	0	0
515	Steel Protective Coating	SF	1266	0	633	633	0
3440	Effectiveness (Steel Protective Coatings)	SF	1266	0	633	633	0
(202) Span 2 supplemental bent:							
Column 1, 1Each corrosion CS2.							
Column 2, 1Each corrosion CS2.							
Column 3, 1Each corrosion CS2.							
Column 4, 1Each corrosion CS2.							
Column 5, 1Each corrosion CS2.							
Column 6, 1Each corrosion CS2.							
Column 7, 1Each corrosion CS2.							
Column 8, 1Each corrosion CS2.							
Span 3 supplemental bent:							

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Column 1, 1Each corrosion CS2. Column 2, 1Each corrosion CS2. Column 3, 1Each corrosion CS2. Column 4, 1Each corrosion CS2. Column 5, 1Each corrosion CS2.							
215	Reinforced Concrete Abutment	LF	56	22	34	0	0
6000	Scour	LF	34	0	34	0	0
(215) Bent 1: Starting 1' from both ends, the embankment has settled 1' below the stub. 24LF scour CS2.							
Bent 5: 10' of the center, embankment has been eroded 1' below the stub. 10LF scour CS2.							
228	Timber Pile	EA	20	17	3	0	0
1140	Decay/Section Loss	EA	1	0	1	0	0
1160	Crack (Timber)	EA	2	0	2	0	0
(228) Bent 1: Pile 1, no defect observed. Pile 2, no defect observed. Pile 3, no defect observed. Pile 4, no defect observed. Pile 5, no defect observed.							
Bent 2: Pile 1, spliced with concrete collar. Pile 2, spliced with concrete collar. Pile 3, spliced with concrete collar. Pile 4, spliced with concrete collar. Pile 5, spliced with concrete collar.							
Bent 3: Pile 1, spliced with concrete collar. 1Each decay Pile 2, spliced with concrete collar. Pile 3, spliced with concrete collar. Pile 4, spliced with concrete collar. Pile 5, spliced with concrete collar.							
Bent 4: Pile 1, no defect observed. Pile 2, 1Each crack CS2 Pile 3, spliced with concrete collar. Pile 4, 1Each crack CS2 Pile 5, spliced with concrete collar.							
231	Steel Pier Cap	LF	29	0	29	0	0
1000	Corrosion	LF	29	0	29	0	0
515	Steel Protective Coating	SF	174	174	0	0	0
(231) Span 3 supplemental bent: Entire length corrosion. 29LF corrosion CS2.							

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
234	Reinforced Concrete Pier Cap	LF	81	60	16	5	0
1080	Delamination/Spall/Patched Area	LF	14	0	10	4	0
1120	Efflorescence/Rust Staining	LF	4	0	4	0	0
1130	Cracking (RC and Other)	LF	3	0	2	1	0
(234) Bent 2: Back side, above Pile, 2LF efflorescence CS2.							
Bent 3: Center, all the way around, 1/8" crack. 1LF crack CS3. Ahead side, 3' left of center and above Pile 4. 2LF efflorescence CS2. Under surface, scattered spalls. 10LF spalls CS2.							
Bent 4: Under surface, from Pile 2 through Pile 4. 4LF spall CS3, 2LF cracking CS2.							
330	Metal Bridge Railing	LF	248	0	248	0	0
1000	Corrosion	LF	248	0	248	0	0
515	Steel Protective Coating	SF	496	0	0	496	0
3440	Effectiveness (Steel Protective Coatings)	SF	496	0	0	496	0
(330) Left rail: Entire length corrosion. 124LF corrosion CS2.							
Righ rail: Entire length corrosion. 124LF corrosion CS2.							

Inspection Photos and Notes



Elevation



Deck overview



Under surface of top flange



Typical superstructure



Bent 3 left side, previously cap has dropped causing 1 1/4" sag in curb.



Bent 3 left side, previously cap has dropped causing 1 1/4" sag in curb.



Bent 3 cap cracked over pile 3



Span 2, supplemental Bent, 2' 0" back of Bent 3. Steel columns with steel saddles under the channel unit legs.



Span 2, supplemental Bent, 2' 0" back of Bent 3. Steel columns with steel saddles under the channel unit legs.



Span 3, supplemental Bent, 2' 3" ahead of Bent 3. Steel columns and steel cap.



Span 3, supplemental Bent, 2' 3" ahead of Bent 3. Steel columns and steel cap.



Typical substructure



Channel right side downstream



Channel left side upstream



Approach

Maintenance Needs

Date Reported: 09/24/2018

Priority: C - Important

Type of Work: Channel Work/Drift Removal

Status: Repair Documented

Component: Channel

Deficiency Description

Right side of spans 3 and 4 has active scour

Remarks

Bent 4 and 5, scour repairs have been made.



Bent 4 and 5, scour repairs have been made.



Left side spans 3 and 4, erosion to slope and ditch line.

Maintenance Needs

Date Reported: 10/04/2016

Priority: D- Routine

Status: Assigned

Type of Work: (Inactive) (Inactive) 9 - None

Component:

Deficiency Description

Bent 1:

Starting 1' from both ends, the embankment has settled 1' below the stub. 24LF scour CS2. Road way is settling due to erosion of embankment below the abutment stub.

Bent 5:

10' of the center, embankment has been eroded 1' below the stub. 10LF scour CS2. Road way is settling due to erosion of embankment below the abutment stub.

Remarks



Bent 5 end, road way is settling due to erosion of embankment below the abutment stub.



Bent 1 end, road way is settling due to erosion of embankment below the abutment stub.



Bent 1:

Starting 1' from both ends, the embankment has settled
1' below the stub. 24LF scour CS2.

Maintenance Needs

Date Reported: 09/24/2018

Priority: D- Routine

Type of Work: Substructure Repair

Status: Monitor

Component: Substructure

Deficiency Description

Bent 4, Pile 2 & 4, moderate vertical crack.

Remarks



Bent 4 pile 4, minor vertical cracks.



Asset #M2114(Routine, Underwater type 2)

SH 160 / S-9 over GRASSY POND CREEK

Location: 1.8 MI EAST OF HERMITAGE

Team Lead: John Parks Inspection Date: 09/30/2024

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is Recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	No
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 - Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	No
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (No)

A-56 - Joint Cleaning/Flushing Needed (No)



Asset #M2114(Routine, Underwater type 2)

SH 160 / S-9 over GRASSY POND CREEK

Location: 1.8 MI EAST OF HERMITAGE

Team Lead: John Parks Inspection Date: 09/30/2024

A-57 - Girder End and Bearing Painting Needed (No)

A-58 - Cap Cleaning/Flushing Needed (No)

A-59 - Joint Repair Needed (No)

A-60 - Full Girder Painting Needed (No)

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (No)

A-63 - Missing/Incorrect Log Mile Signage (No)

A-64 - Vegetation Removal Requested (No)

A-65 - Clogged deck drains?



Asset #M2114(Routine, Underwater type 2)

SH 160 / S-9 over GRASSY POND CREEK

Location: 1.8 MI EAST OF HERMITAGE

Team Lead: John Parks Inspection Date: 09/30/2024

A-66 - Approach minor pothole/leveling needed



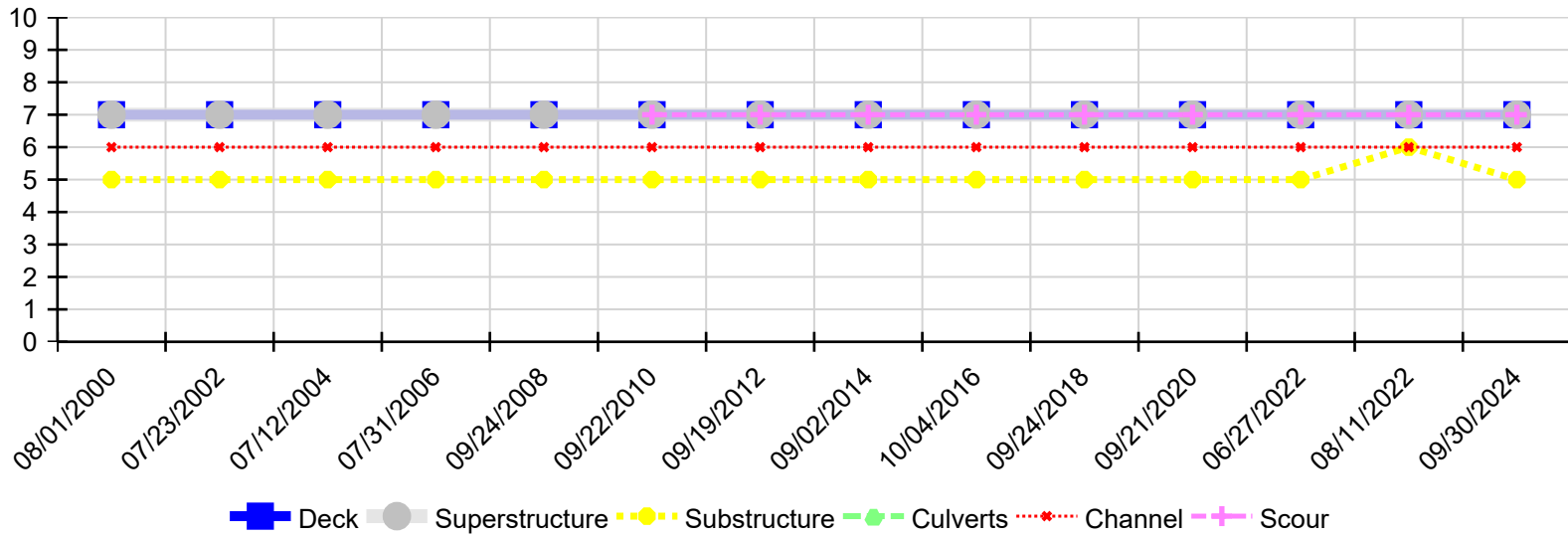
Asset #M2114(Routine, Underwater type 2)

SH 160 / S-9 over GRASSY POND CREEK

Location: 1.8 MI EAST OF HERMITAGE

Team Lead: John Parks Inspection Date: 09/30/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
09/30/2024	7	7	5	N	6	7
08/11/2022	7	7	6	N	6	7
06/27/2022	7	7	5	N	6	7
09/21/2020	7	7	5	N	6	7
09/24/2018	7	7	5	N	6	7
10/04/2016	7	7	5	N	6	7
09/02/2014	7	7	5	N	6	7
09/19/2012	7	7	5	N	6	7
09/22/2010	7	7	5	N	6	7
09/24/2008	7	7	5	N	6	N
07/31/2006	7	7	5	N	6	N
07/12/2004	7	7	5	N	6	N
07/23/2002	7	7	5	N	6	N
08/01/2000	7	7	5	N	6	N